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LAND DEVELOPMENT PLAN

LAND USE SURVEY AND ANALYSIS
POPULATION AND ECONOMIC STUDY

WARSAW, NORTH CAROLINA

ABSTRACT

TITLE : Land Development Plan, Warsaw, North Carolina, Land Use Survey and Analysis, Population and Economic Study

AUTHOR : State of North Carolina, Department of Local Affairs Division of Community Planning

SUBJECT : Survey and analysis of existing land use, population, and economy with a plan for future development of the planning area

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Division of Community Planning
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ABSTRACT : The Land Development for Warsaw includes a survey of the existin land use and a brief study of the population and economy of the planning area. These provide a sound basis for the twenty year land development plan which establishes long range, general policies for the physical development of Warsaw. Means of plan implementation are set forth consistent with community goals an objectives.

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WARSAW, NORTH CAROLINA

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PREPARED FOR:

THE TOWN OF WARSAW, NORTH CAROLINA

J. E. STRICKLAND, MAYOR

TOWN BOARD OF COMMISSIONERS

Dr. Mett Ausley
Cecil A. Bostic
W. E. Foster
L.P. McCullen
W. C. Tew

PREPARED BY:

WARSAW PLANNING BOARD

Brooks Boyette
James Edmundson
J.B. Herring, Jr., Chairman
Robert A. Lee
Riddick E. Wilkins

Technical Assistance for the Preparation of this Report provided by:

NORTH CAROLINA DEPARTMENT OF LOCAL AFFAIRS
DIVISION OF COMMUNITY PLANNING

George J. Monaghan, Administrator
Ralph Willoughby, Project Planner
Ronald L. Hickman, Project Planner

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TABLE OF CONTENTS PAGE

I. INTRODUCTION 1

Planning Area 2
Regional Setting 3
Historical Background 3

II. POPULATION 4

Duplin County's Population 4
Warsaw Township Population 6
Current Population 7
Future Population 8

III. ECONOMY 9

Education 9
Agricultural Employment 10
Industrial Employment 11
Recruitable Labor Force 13
Income 15
Retail Trade Area 16

IV. NATURAL RESOURCES 18

Topography and Drainage 18
Soil Suitability 18
Water Resources 19

V. LAND DEVELOPMENT 21

Residential Land Use 21
Future Residential Development 24
Commercial Land Use 26
Commercial Development 27
Industrial Land Use 28
Industrial Development 29
Recreational, Governmental, and Cultural Land Uses 30
Recreational, Government, and Cultural Development 31
Rural Residential 32
Streets and Highways 32
Plan Implementation 36

LIST OF ILLUSTRATIONS

TABLES

NUMBER		PAGE
1	Regional Population	5
2	Population Percentage	7
3	Future Population	8
4	Educational Attainment by Race	9
5	Duplin County Agricultural Employment	10
6	Duplin County Farm Products Sold	12
7	Number of Recruitable Production-Related Workers Within Area	14
8	Housing Conditions Within Warsaw	22
9	Housing Conditions Within Fringe Area	23

MAPS

NUMBER		FOLLOWS PAGE
1	Regional Location	2
2	Generalized Soil Map	18
3	Existing Land Use	24
4	Land Development Plan	32

I. INTRODUCTION

Concerned with the haphazard growth that had occurred in and around Warsaw, the Town Board of Commissioners signed a contract with the Department of Local Affairs, Division of Community Planning to initiate a planning program aimed at improving the quality of the Warsaw living environment. A five member planning board was appointed and charged with the responsibility of conducting the planning program, with technical assistance from the Division of Community Planning. The Planning Board is an advisory body with no legislative powers. Its function is to prepare studies, make plans, and present recommendations to the Town Board of Commissioners. The elements of the planning program are:

Base Mapping
Land Use Survey and Analysis
Population & Economic Study
Land Development Plan
Community Facilities Plan
Subdivision Regulations

A good base map is essential to a planning program. Prepared from an aerial photograph, the base map shows rights-of-way, political boundaries, street names, and property lines in the incorporated area.

The Land Use Survey and Analysis provides a detailed inventory of the various uses made of the land in the planning area*, and will be the basis for the Land Development Plan.

The Population and Economic Study provides insight into the composition of the past and present population, a look at the future population, and an analysis of the present local economy, with insight into the future economy of the planning area.

The Land Development Plan provides the framework for sound physical development by designating the best future arrangement of the major land uses expected in the next twenty years.

The Community Facilities Plan will complement the Land Development Plan by inventorying and evaluating the community services and facilities provided by the town. Recommendations are made that will render each facility adequate throughout the twenty year planning period.

*The planning area encompasses all the land within a one mile radius of the corporate limits of Warsaw.

The Subdivision Regulations ordinance is basically a tool for making the Land Development Plan a reality by regulating the division of raw land into lots, streets, etc.

This document, the Land Development Plan also includes the Land Use Survey and Analysis and the Population and Economic Study. In preparing the Land Development Plan the Warsaw Planning Board has attempted to coordinate the general public's desires with potentials and assets possessed by the town. To accomplish this, the plan strives to attain the following goals:

1) To provide for the efficient use of land by encouraging compact development which will require a minimum expenditure of public and private money to provide necessary services and facilities;

2) To preserve suitable industrial and commercial sites in order to expand the economic base of the town in a manner that is visually pleasing and functional;

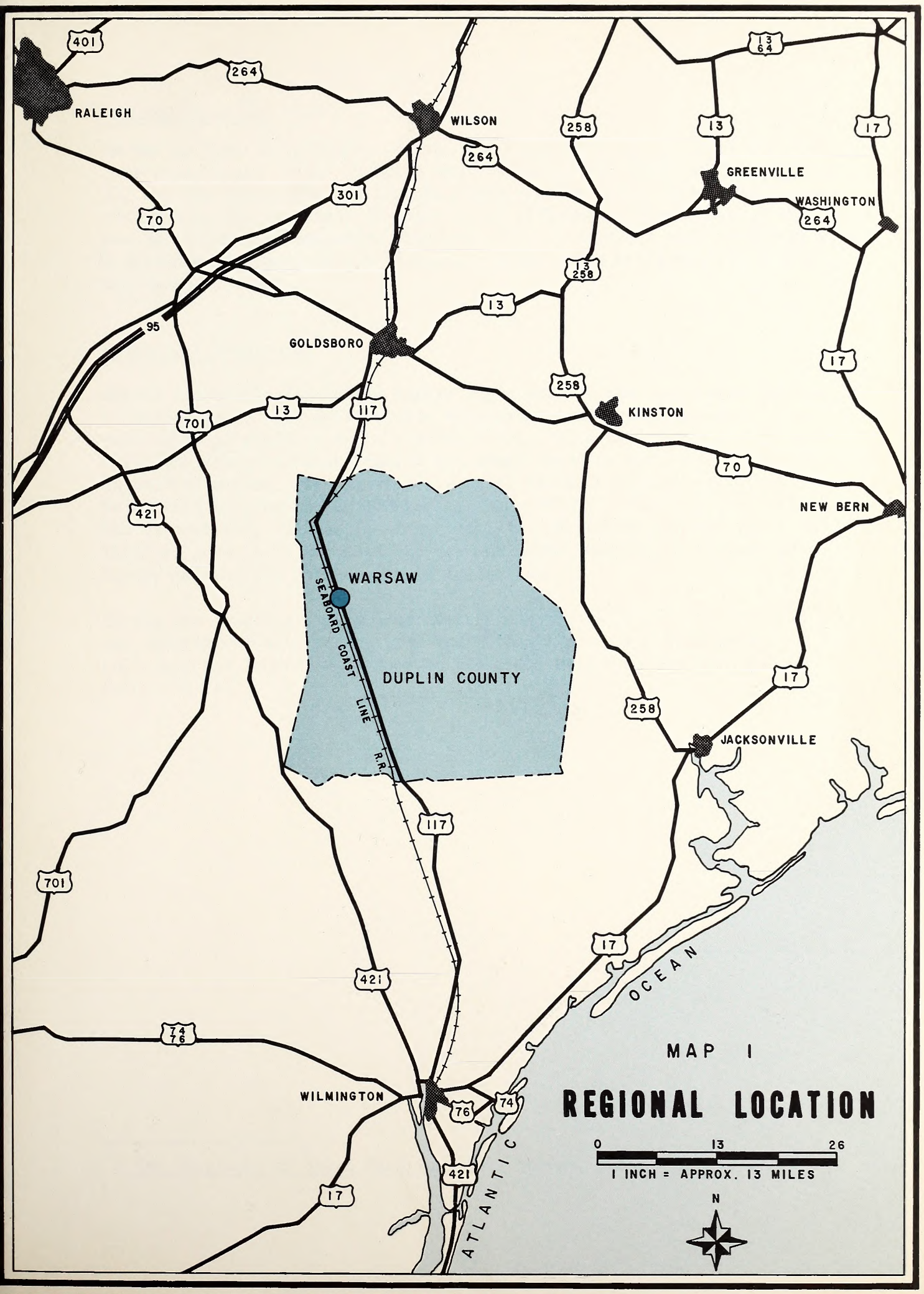
3) To insure that residential development occurs in areas suitable for such development;

4) To development a system of streets and roads that will provide for the safe, convenient, and efficient movement of people and goods; and

5) To provide a comprehensive plan for community facilities that will provide for a high level of service for all residents throughout the planning period.

Planning Area

The planning area includes the land within the corporate limits of Warsaw and the land within a distance of one mile outside the corporate limits. The area outside the corporate limits, hereafter referred to as the "fringe area", is included for several reasons. The fringe area represents the future of Warsaw. This area also holds the future problems for Warsaw. It would not be feasible to plan for future development without planning for the future expansion within the fringe area. Development standards should be adopted for growth within the fringe area. This will help prevent problems that might exist when Warsaw extends its corporate limits. Warsaw has legislative authority to enforce zoning regulations and subdivision regulations within the one mile fringe area, although this authority is not presently used.


RALEIGH
WILSON
GREENVILLE
WASHINGTON
GOLDSBORO
KINSTON
NEW BERN
JACKSONVILLE
WILMINGTON
WARSAW
DUPLIN COUNTY
SEABOARD COAST LINE R.R.
ATLANTIC OCEAN
401
264
258
13
17
13 64
301
70
95
13 258
701
117
421
74 76
74
76
MAP I
REGIONAL LOCATION
0
13
26
1 INCH = APPROX. 13 MILES
N

Regional Location

Warsaw is located in Duplin County, well known for agricultural and food crop production. Major shipping facilities are extremely important. U.S. 117 and the Seaboard Coast Line Railroad provide direct access to Wilmington, approximately 50 miles south of Warsaw. Wilmington is one of two North Carolina seaports. Morehead City is directly east of Warsaw at a distance of approximately 85 miles. Major urban areas within 50 miles are shown on Map 1.

Historical Background[1]

Warsaw was originally called Duplin Depot and the name was later changed to Mooresville. Its present name originated from the combination of a well liked personality and a popular novel. With the coming of the railroad, the Atlantic Coast Line, a man named Thaddeus Love came to Mooresville as station master. At this time, a novel titled, Thaddeus of Warsaw was being read by practically everyone in Mooresville. When the post office was established, the people of Mooresville remembered both the novel and Thaddeus Love and asked that the town be named Thaddeus of Warsaw, but Warsaw was shorter and acceptable to everyone.

Warsaw was originally a fueling station for the railroad, and was laid out exactly one mile square from the 50th milepost from Wilmington. A toll gate was located at Warsaw on the plank road from New Bern to Fayetteville.

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[1] A New Geography of North Carolina, Bill Sharpe, 1965, Vol. IV.

II. POPULATION

Eastern North Carolina has been closely associated with agriculture for several decades. Industry in this part of the State was agriculturally oriented and the majority of the people depended on agriculture to provide their incomes. However, the decade of 1950 to 1960 indicated a transition in eastern North Carolina. Farm operations underwent a tremendous modernization program. Persons accustomed to farming as a means of subsistence could no longer obtain jobs in agriculture nor could they financially afford to mechanize their farm operations. Farmers and farm laborers moved to urban areas within the State during the 1950's seeking employment while many were forced to leave the State. This caused several eastern North Carolina counties to lose population by outmigration.

Duplin County was typical of the eastern counties. Agriculture remained the primary commodity and the county lost population. Table 1 provides information on population for Duplin and surrounding counties. As indicated by Table 1, several counties increased in population from 1950 to 1960. This increase was due to (1) industry providing jobs and drawing people from surrounding counties to urban areas, and (2) military bases. Seymour Johnson Air Force Base in Wayne County and Camp Lejune in Onslow County supplemented these county's populations and prevented overall losses. Lenoir's growth is attributed partly to the location of the large industrial employer, DuPont. Duplin, Sampson, Jones and Pender either lost population or remained stable, while their primary commodity during this period was agriculture.

Most of the information contained in this section was obtained from the U.S. Bureau of the Census. The information available for communities under 2,500 population is limited and therefore, data for the township or county may be used to indicate trends within the town. Where possible, information was obtained from interviews with local citizens.

Duplin County's Population

Duplin County's past population growth had been no more than a natural increase until 1950. From 1910 to 1940, agriculture was the economic base for the county and the county showed a slight population increase each decade. From 1940 to 1950, the county experienced its smallest gain in population. World War II took many young men out of Duplin County during the first 5 years of the decade. Many of these persons were killed in action or did not return after the war ended. As previously stated, the decade of 1950-1960 gave Duplin County its first decrease in population since 1910, primarily because of farm mechanization.

TABLE 1 REGIONAL POPULATION

COUNTY	1910	1920	% CHANGE	1930	% CHANGE	1940	% CHANGE	1950	% CHANGE	1960	% CHANGE
Duplin	25,442	30,223	+18.8	35,103	+16.1	39,739	+13.2	41,074	+ 3.3	40,270	- 2.8
Wayne	35,698	43,640	+22.2	53,013	+21.5	58,328	+10.0	64,267	+ 10.2	82,059	+27.7
Sampson	29,982	36,002	+20.1	40,082	+11.3	47,440	+18.3	49,780	+ 4.9	48,013	- 3.5
Pender	15,471	14,788	- 4.4	15,686	+ 6.1	17,710	+12.9	18,423	+ 4.0	18,508	+ 0.4
Onslow	14,125	14,703	+ 4.1	15,289	+ 4.0	17,939	+17.3	42,047	+134.0	82,906	+96.7
Lenoir	22,769	29,555	+29.8	35,716	+20.8	41,211	+15.4	45,953	+ 11.5	55,276	+20.3
Jones	8,721	9,912	+13.6	10,428	+ 5.2	10,926	+ 4.7	11,004	+ 0.7	11,005	0.0

SOURCE: U. S. Bureau of the Census

The overall population growth for Duplin County has been going downhill since 1910. Table 1 shows that each decade's growth has decreased from that of the previous decade. A special census conducted in November of 1965 revealed a further loss in population for the county - from 40,270 to 37,959. This is a 5.7 percent loss. Small population decreases are expected to continue as long as agriculture dominates the economy.

Warsaw Township Population

Although the county has been losing population, three of the 13 townships have increased each decade since 1910. These three are Island Creek, Rose Hill and Warsaw, townships in which the three largest towns in the county are located. These towns, Rose Hill, Wallace and Warsaw, have within them or located nearby, the majority of the industrial and commercial activity within the county. They are also located within reasonable commuting distance of several industries in adjacent counties. The townships have been affected by the same trends as has the county and the region; the rural to urban movement. The predominantly rural townships began losing population after 1940, and only those townships with urban facilities increased in population.

Warsaw and Warsaw Township have shown an increase in population each decade since 1910. Warsaw's population has grown at a much faster rate than has the township. Since 1910, Warsaw's population has increased 207 percent as opposed to 104 percent for the township.

Table 2 is shown in order that the reader might get some idea of the role Warsaw plays in the township and as a part of the county. Warsaw remained almost static in its representative percentage of the township and county population from 1910 to 1950. However, with annexation of adjacent urban areas in 1950, the urban population percentage increased within the township. The township itself experienced a gain in total population, the largest increase since 1910. This again was the influence of the trend taking place in eastern North Carolina, the rural to urban movement.

An additional development in the early 1950's helped prevent a population decrease for the township and town. In 1953 Warsaw created a local Industrial Development Commission. Its success was immediately felt since a small garment factory located within Warsaw that year. Women then had an opportunity to become part of the labor force. This enabled many persons and families to remain within the locality. Also industries were beginning to locate in surrounding counties and the men could commute to these jobs.

The special population census conducted in 1965 found that the population in both Warsaw Township and Warsaw Town had declined slightly since 1960. The Township lost 299 people for a 5.8 percent decrease. The Town lost 257 people for a 11.6 percent decrease. This was the first decrease for either the township of the town in this century. Only the Rose Hill Township had an increase over the 1960 population and it was only 25 people. (0.9 percent increase).

This loss in population can be attributed to the loss in agricultural jobs. In Warsaw Township the nonwhite population decreased by 211 from 1960 to 1965 - a 9 percent loss, while the white population lost only 88 people. Most of these people migrated, seeking greater employment opportunities.

TABLE 2

POPULATION PERCENTAGE

	Population						
	Warsaw			Warsaw Twp.			
Year		% of Twp.	% of County		% of County	Duplin County	% Change over Previous Census
1910	723	34.5	2.9	2,492	9.8	25,442	---
1920	1,108	31.8	3.7	3,481	11.5	30,223	18.8
1930	1,222	33.5	3.5	3,638	10.4	35,103	16.1
1940	1,483	35.3	3.7	4,196	10.5	39,739	13.2
1950	1,598	33.2	3.9	4,808	11.7	41,074	3.3
1960	2,221	43.6	5.5	5,088	12.6	40.270	- 2.0
1965	1,964	41.0	5.2	4,789	12.6	37,959	- 5.7

Source: U.S. Bureau of the Census.

Current Population

Few people in Warsaw are aware that the 1960 population decreased to 1,964 in 1965. The 1970 preliminary Census figues count only 2,700, and this includes 183 dwelling units annexed in December 1969. It should be emphasized that these figures are preliminary and subject to change.

The 1970 Census counted 965 dwelling units, an increase of 255 over 1960. The population per dwelling unit dropped from 3.12 in 1960 to 2.79 in 1970. Thus, families are smaller. It is doubtful that parents have less children, but there are probably some young families with no children and many adults living alone in Warsaw. Many of the younger families have migrated to larger urban areas seeking greater employment opportunities.

Future Population

The future population for a town the size of Warsaw is extremely difficult to predict. There are too many variables that can effect the future. One rather large industry located in or near Warsaw could create a sudden increase in population. National Spinning Company, Warsaw Manufacturing, Reeves Brothers, Warsaw Block Company and Quinn Wholesale have undoubtedly helped Warsaw increase its population. These industries have provided jobs for many persons both in industry and in commercial businesses catering to industry and the local farming operations.

The Town of Warsaw is expected to increase its population at a faster rate than either Warsaw Township or Duplin County. But caution must be exercised under the existing circumstance in the planning area. The Warsaw population decreased from 1960 to 1965 and the 1970 population only recorded a 21 percent increase over the 1960 population. This included recent annexation of more than 500 people. Without the annexation, there would have been a loss from 1960 to 1970.

Since the population of Warsaw is unstable, no attempt will be made to project the future population using conventional methods.

TABLE 3

	1970	1980	1990[3]
Warsaw Town	2,700[1]	3,200	3,800
Warsaw Planning Area	3,100[2]	3,800	4,500

[1] Preliminary estimates by U.S. Census Bureau.

[2] 1970 planning area population derived by multiplying number of dwelling units (127) in the one mile area by the 1960 population per dwelling unit (3.12) and adding to town population.

[3] The above subjective estimates were made despite a loss of population over the last decade, in the planning area.

III. ECONOMY

Education

The level of educational attainment is normally a good indication of the type of employment available in an area. Low educational attainment usually results in low paying jobs. Today, most jobs require at least a high school education. The median number of school years completed for Warsaw Township in 1960 was 8.6 years, slightly below the state average of 8.9 years. Industries prefer high school graduates, and many would prefer some higher education. Location of an industry would not be feasible unless there is an adequately educated or trained labor force within the area.

Since most jobs today require a high school education, this should be an area of great interest to both the people of Warsaw as well as the county. It is a deplorable situation when only 26.3 percent of the population over 25 have high school educations or better.

Table 4 compares white and Negro educational attainment for Warsaw Township in 1960. In most levels of school years completed the Negro is far behind the white population. The median number of school years completed by Negroes is 3.4 years less than by whites. This is far below the overall state average. An education of this level cannot demand more than the minimum wage if any job is available. Industries interviewed indicated they would prefer a high school education but did not require one.

TABLE 4

EDUCATIONAL ATTAINMENT BY RACE
1960
WARSAW TOWNSHIP

	White		Negro		Total	
School Years	No.	%	No.	%	No.	%
No Education	44	3.0	63	5.8	107	4.2
Elementary:						
1-4 years	198	13.4	248	23.0	446	17.5
5-7 years	273	18.5	345	32.0	618	24.2
8 years	59	4.0	116	10.8	175	6.8
High School:						
1-3 years	356	24.1	180	16.7	536	20.9
4 years	306	20.8	56	5.2	362	14.2
College:						
1-3 years	154	10.4	9	0.8	163	6.4
4 years	86	5.8	61	5.7	147	5.8
TOTAL	1,476	100.0	1,078	100.0	2,554	100.0
Median No. of School Years Completed	10.4		7.0		8.6	

Source: U.S. Bureau of the Census

It should be evident that at least a high school education is an absolute necessity. If Warsaw expects to provide labor for industry, the educational levels of the people must be raised. The people of the area that have not acquired a high school education should be encouraged to complete their education through adult education classes.

James Sprunt Technical Institute located in Kenansville offers adult education courses to both college and noncollege students. Short courses are also offered that are tailored to meet the needs of industry.

There were 963 students enrolled in the fifth grade in Duplin for the 1961-62 school year. In 1969 Duplin County had only 560 high school graduates. Thus, 403 students either dropped out of school or moved from the county. The drop-out problem is widespread in North Carolina. Efforts must be made to remove barriers for those students who see little need to complete their high school education. High schools should offer courses which prepare students for technical vocations as well as for college.

Of the 560 students who graduated in 1969, 176 or 31.5 percent entered college. Trade, business, and nursing schools enrolled 125 of these graduates; 16 entered military service; and 147 were gainfully employed.

Agricultural Employment

Warsaw for many years has depended on agriculture or agricultural related businesses to provide jobs for its residents. After interviewing several industrial personnel officers in the area, the county's Industrial Director and the Director of the local Employment Security Commission, agriculture is thought to be less important as an employer than it was several years ago.

Table 5 provides information on the change in agricultural employment since 1962.

TABLE 5

DUPLIN COUNTY AGRICULTURAL EMPLOYMENT
(1962-1968)

Year	Number Employees	Percent Change
1962	7,760	---
1963	8,090	+ 4.2
1964	7,390	- 8.9
1965	6,410	-13.0
1966	6,020	- 6.1
1967	5,650	- 6.1
1968	5,110	- 9.5

Source: Employment Security Commission of North Carolina

From 1963 through 1969 the number of agricultural workers has decreased by 36.8 percent or 2,980. By comparison, the Employment Security Commission indicates that manufacturing workers have increased by 71.4 percent (from 2,100 to 3,600) for the same period of time. However, agriculture still employs the largest number of workers in Duplin County.

Duplin County's agricultural base has changed tremendously since the last decade. Field crops, vegetables, fruits and forest products no longer dominate the farm economy. Livestock production sales in 1964 almost surpassed the crop production sales. Table 6 provides information on farm products sold since 1954.

If the trend continues in the production of poultry and poultry products, this portion of the agricultural products could become the number one agricultural commodity in Duplin County by the time the 1969 Census of Agriculture is published.

Industrial Employment

Three industries and one wholesale food distributor influence the economy of Warsaw and its planning area. Warsaw's industrial employment is, however, rather odd. The three industries, Warsaw Manufacturing Company, the largest industrial employer within the city limits, Reeves Brothers, Inc., and National Spinning Company, located within five miles of Warsaw, predominately employ women. All three of these industries are sewing operations or machine operations. Warsaw Manufacturing Company employes 102 persons with approximately 95 percent female, National Spinning employs approximately 340, with about 60 percent female, and Reeves Brothers employs about 400 with 75 percent of them being female.

Each industry interviewed was asked to estimate the number of employees living within the Warsaw planning area. Warsaw Manufacturing estimated 65 employees, National Spinning, 85 employees, and Reeves, 35 employees. This indicates 21 percent of the total employees of the three industries live within the Warsaw planning area.

However, this leaves one important question still unanswered. Where do the men of the Warsaw planning area work? It was learned that the majority of the male labor force of Warsaw also works in industry, but not in Warsaw or Duplin County. These men commute to nearby counties to work in industrial plants or in civil service jobs. The men commute to Fayetteville, Clinton, Wilmington, Kinston, Camp Lejune, Seymour Johnson Air Force Base and Goldsboro.

TABLE 6 DUPLIN COUNTY FARM PRODUCTS SOLD
(1954-1964)

PRODUCE	1954	1959	PERCENT	1964	PERCENT
Field Crops	$16,893,629	$15,944,724	- 5.6	$20,257,349	+ 27.0
Vegetables	490,559	477,159	- 2.7	640,796	+ 34.3
Fruits and Nuts	180,733	384,306	+ 112.6	333,974	- 13.1
Forest Products	157,064	479,444	+ 205.2	413,425	- 13.8
Total Crops	$17,721,985	$17,285,633	- 2.4	$21,645,544	+ 25.2
Poultry	611,273	6,825,461	+1,016.6	16,804,307	+146.2
Dairy	122,136	322,830	+ 164.0	279,690	- 13.3
Livestock	1,494,115	2,331,993	+ 56.1	2,207,619	- 5.3
Total Livestock	$ 2,227,524	$ 9,480,284	+ 325.59	$19,291,616	+103.5
Total Farm Products	$19,949,509	$26,765,917	+ 34.2	$40,938,047	+ 52.9

SOURCE: Census of Agriculture, 1954, 1959, 1964.

There are few employment opportunities for men in or near Warsaw. The largest employer of men is Quinn Wholesale employing about 90 persons. Warsaw Block Company employs a small number of men but the exact figure was not available. Agricultural employment is predominately of a seasonal nature, and the wages are low. Therefore, the men seek better employment opportunities and have to go outside of Warsaw and usually outside the county to obtain adequate employment. The remaining local male employees are primarily service station attendants, clerks in various businesses, a small number of professional men and a few town employees.

Recruitable Labor Force

The Employment Security Commission estimates quarterly the number of recruitable workers for industrial employment (Table 7). The figures for the Warsaw area dated February 27, 1969, were compiled from December data.

The Employment Security Commission provides information on the recruitable labor within the Warsaw area. The Warsaw area covers a radius of 25 road miles from Warsaw. This distance represents the probable maximum distance employees will drive to work. The area involved includes portions of Duplin, Lenoir, Pender, Sampson and Wayne Counties.

When they were interviewed, the local industry personnel were questioned as to the availability of labor. In all instances the industries noted they had depleted the area of all adequate labor. However, only two of the industries questioned employed Negroes to any degree.

Negroes have difficulty finding adequate jobs. Most Negroes would prefer full-time employment but many must settle for seasonal labor in the agricultural field. This was pointed out in an interview with the local Employment Security Commission office. Negores want and prefer year-round employment but is is not available.

What can be done to provide jobs for both the white and Negro population? One probable solution would be for those persons not able to secure adequate jobs to move from the Warsaw area. In all probability, these people would have to move out of the county. If seasonal employment is all that is available, a move to an area where permanent employment is available would be logical.

Another solution is to provide jobs locally for these people. Since most of the underemployed people have worked or are forced to work in agriculture, agricultural processing plants might provide more jobs related to agriculture. The wages might not be top pay but many jobs could be provided that were not available in the past.

TABLE 7 NUMBER OF RECRUITABLE PRODUCTION-RELATED WORKERS WITHIN AREA

MILES	TOTAL	Total Available Workers		Experienced Manufacturing Workers		All Other Experienced Workers		Inexperienced but Referable and Trainable	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
0 to 15	1,705	630	1,075	90	270	335	355	205	450
15 to 20	870	310	560	45	135	160	175	105	250
20 to 25	1,050	375	675	50	160	185	190	140	325
TOTAL	3,625	1,315	2,310	185	565	680	720	450	1,025

SOURCE: Employment Security Commission

It is thought that processing plants could provide many jobs for Negroes since the jobs would require unskilled or semiskilled labor. Poultry processing plants and the pickle plant at Faison employ Negroes. It is recommended that the people and governing body of Warsaw work with the Duplin County Industrial Commission in locating a food processing plant in the immediate area.

A small minority controls very large land holdings in Duplin County. These landowners, as were their parents, have been farmers for several decades. These persons do not want to lose their farm labor to industry and therefore are not willing to sell desirable land to industry. Their interest basically revolves around agriculture and the number of laborers they can hire for the harvest season. It is thought that these persons would be more responsive to agricultural related industry such as food processing plants.

Income

Industries were asked what an average paycheck would total for a worker employed in a position that was common to that particular industry. In all cases, the machine operator was the more common position, and salaries ran from a low of $72.00 per week to $85.00 per week as a high. This high figure was slightly inflated due to the fact that the low figure of $72.00 was for a 40 hour week and the $85.00 was due to overtime. In most cases, $1.80 to $1.85 an hour was the average pay for the machine operator.

On the surface, $72.00 per week or even $80.00 per week does not appear to be an extremely low wage. However, a closer look shows the above weekly wages would total only $3,600 - $4,000 per year. This is barely a subsistance level income and depending upon family size is near the poverty level. However, in many instances this industrial machine operator job is a second job for the family.

A consultation with industry and the local Employment Security Commission showed that the majority of the persons employed within the Warsaw planning area earn on the average, $80.00 per week. This would be comparable with the overall county wage average of $81.63 in the second quarter of 1968.[2]

In jobs other than industry within the Warsaw planning area, the minimum $1.60 per hour rate has become an accepted maximum.

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[2] Employment Security Commission of North Carolina, Bureau of Employment Security Research.

Retail Trade Area

Warsaw's retail commercial influence is extremely small. The retail shopping area is not attractive to the shopper. It does not provide the large variety of goods and services normally associated with major shopping areas. Warsaw will probably remain a local shopping area for many years. Large chain department stores will not locate in an area where there are not enough people to support that type store.

Clinton, Goldsboro and Wilmington, in that order, probably influence most shoppers from the Warsaw planning area. Clinton, located only 13 miles away and with a greater variety of stores and goods, attracts the bulk of the out-of-town shoppers from the Warsaw area.

Not only does Warsaw's main shopping area suffer from a general lack of goods and services, but there are physical problems in its shopping area which need attention. As with many eastern North Carolina towns, the railroad parallels the main shopping area, causing both vehicle and pedestrian traffic problems. All parking is on the street parking. There are no vacant lots or other available areas convenient for off-street parking. The buildings housing the stores and shops are old and unattractive.

Conclusions

A large portion of the economy of Warsaw is directly related to industry, but not necessarily to industry located in or near Warsaw.

Most of the male industrial employment opportunities are located outside Warsaw or in adjoining counties.

Sophisticated industry, those hiring the draftsman, engineer, college graduate, those that pay better than the average pay scale and those that are basically stable industries will not locate in Warsaw or Duplin County until the overall educational attainment and the skill levels of the local labor force are upgraded.

The educational attainment level for Negroes is far below the white level. Therefore, most Negroes cannot demand more than a minimum wage, if jobs are available.

The Negro population does not have the job security needed to keep them off welfare since seasonal jobs in agriculture represent the majority of the job opportunities for the Negro.

Recommendations

Industry to fit the needs of the local citizens must be sought. The local industrial committee and the county industrial commission must seek industry that will employ the unskilled. The local food growing market should be able to support food processing plants. This type industry would provide jobs for the unskilled.

The people of Warsaw must work toward better education for the overall populace. In the past, the education of the Negroes has been neglected. The condition of many schools has been neglected. The responsibility for better education and school facilities is a local responsibility. Local voters elect the County Commissioners and the School Board, and they also approve or disapprove bond issues. Local cooperation and coordination from both blacks and whites is vital to the success of the future of Warsaw and Duplin County.

IV. NATURAL RESOURCES

Topography and Drainage

Warsaw's topography is relatively flat and rises only 32 feet above mean sea level. The town is plagued with poor drainage. The poor drainage is a result of the flatness of the terrain which deters the runoff of surface water into nearby streams and creeks. However, the flat terrain is only a part of the problem. The creeks draining Warsaw over the years, have silted in and caused the drainage channels to become very small.

Warsaw has two drainage channels; Stewarts Creek, draining two sections of planning area and Turkey Creek. The problem of inadequate drainage is Stewarts Creek which drains approximately 75 percent of the land within the planning area. Stewarts Creek is filled with sand and debris and has resulted in a very small drainage channel. Heavy rains, in most instances, cause flooding in several areas of the planning area. Cleaning the Creek of trash and silt and inspecting periodically is needed to keep this vital drainage channel open.

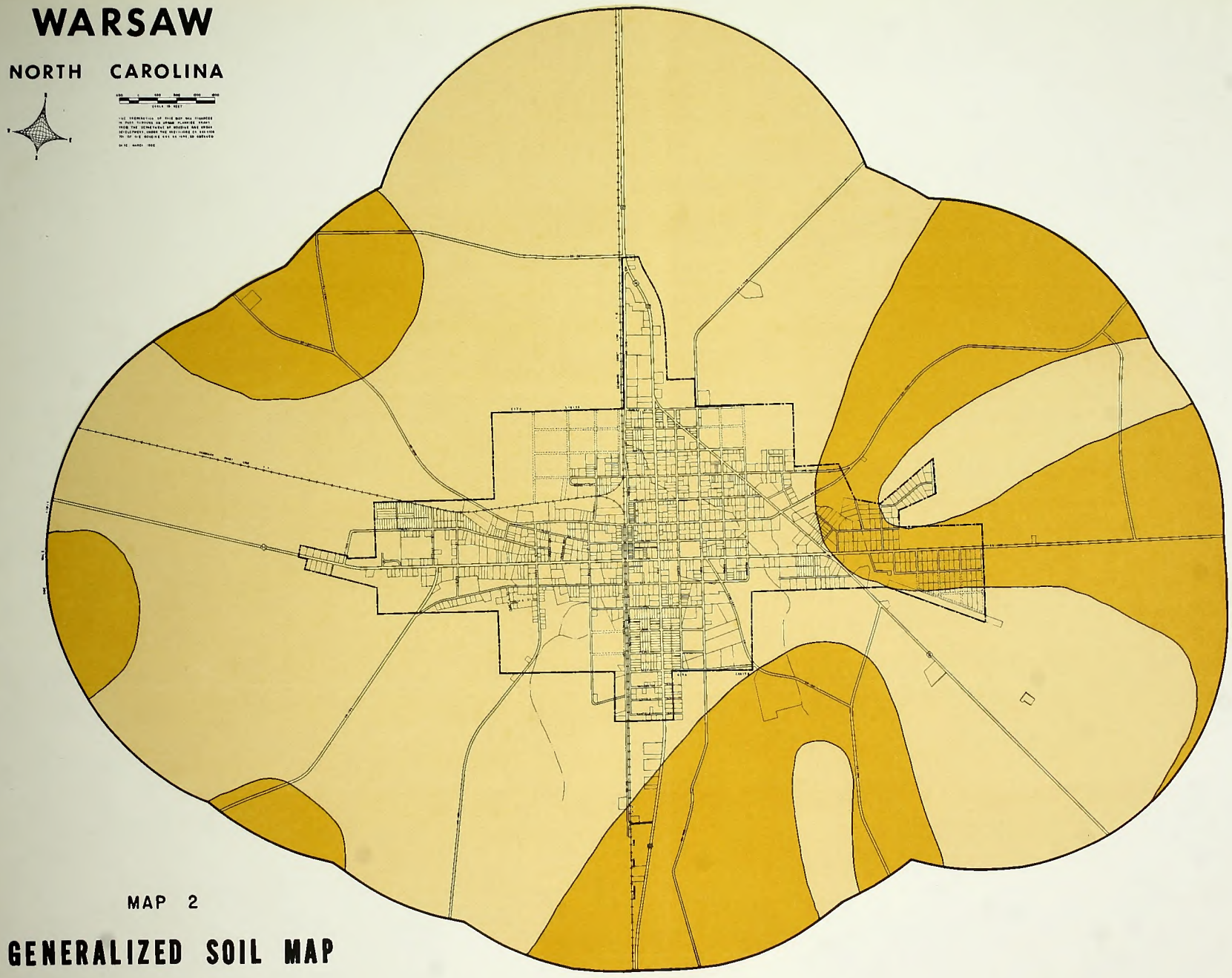
Soil Suitability

The suitability of soils for urban development must be considered before a plan for future growth can be realistically developed. Soil characteristics, such as percolation, water table and flood hazards, place limitations on urban development, and thereby help determine the best use of land.

The Soil Conservation Service, U.S. Department of Agriculture recently completed a survey of the soils in Duplin County. An analysis of their findings showed that the soils within Warsaw are not generally good for urban uses. Less than 20 percent of the planning area has soils with slight limitations for urban uses. Approximately 75 percent of the soils in the planning area are in the Rains-Lynchburg-Goldsboro category. These soils generally have high water tables and moderate to severe limitations for urban development. The town is very flat with little natural runoff. Most rainfall relies on the town's storm drainage system or evaporation. High water tables can normally be lowered by installing drain tiles. The use of septic tanks should be prohibited unless a soil percolation test proves the soil's ability to support septic tanks. Map 2 is a generalized soil map showing those areas generally suited for urban development and those generally unsuited for urban development.

WARSAW

NORTH CAROLINA



MAP 2

GENERALIZED SOIL MAP

GOOD — GENERALLY SUITED FOR URBAN DEVELOPMENT

POOR — GENERALLY UNSUITED FOR URBAN DEVELOPMENT

Water Resources

While the Northeast Cape Fear River provides an adequate surface water supply in Duplin County, it is used only for recreation. All domestic and municipal water supplies are obtained from ground water. Ground water is plentiful throughout most of Duplin. The water table is normally within 20 feet of the surface. The chemical quality of the water is satisfactory for most uses.

The Town of Warsaw obtains its water supply from two deep wells, both approximately 360 feet deep. Each well yields 300 GPM. This water is only treated with chlorine. More detailed information of the town's water supply will be available in the Community Facilities Plan.

V. LAND DEVELOPMENT

Planning is a sound and business-like means of acquiring a desirable living environment. The Land Development Plan for Warsaw provides the framework for sound physical development anticipated within the next two decades. It attempts to provide long-range and short-range vision into the future development of the town. It proposes short-range as well as long-range goals to be accomplished by the town as the plan is being carried out.

Residential Land Use

Residential development is the largest use of land within Warsaw. Warsaw's residential development is typical of most of North Carolina's small towns. The older and larger homes are located within a short distance of the central business district. From the close-in, older and larger homes, the next area contains homes approximately 20-30 years old. Most of the new growth within the past 10 years is found in the newly annexed areas.

Warsaw also has its poorer neighborhoods. The area west of Bell Street, which is one block west of the railroad tracks, is a predominately non-white area as is the area south of Warsaw along both sides of U.S. 117. These are the areas of Warsaw where deteriorating and dilapidated housing represent the majority of the housing units. Small lots, unpaved and poorly maintained streets, and a general lack of community services within the nonwhite residential areas in Warsaw are again typical of most towns in eastern North Carolina.

Recently, the mobile home has appeared and is evident within Warsaw. The mobile home provides fairly low cost housing for many persons, especially young marrieds and elderly persons. Several mobile home parks are located within the corporate limits of Warsaw. There were a total of 34 mobile homes within Warsaw at the time the land use survey was conducted. Several of the mobile homes were located on the same lot with a conventional dwelling. Such practices should not be allowed. Mobile homes should be required to abide by dimensional requirements just as conventional dwellings. Future plans for Warsaw should consider the fact that the mobile home is now a part of the landscape.

The fringe area of Warsaw is basically farmland. However, some nonfarm residents are seen scattered along the roads leading to and from Warsaw.

Housing Conditions

At the same time the land use survey was conducted, the conditions of the housing units were noted. The conditions were obtained by a windshield survey; the interiors were not observed. Three classifications have been used for housing conditions. These are explained as follows:

Standard----------housing new or old, in excellent physical condition. There is no noticeable need for repair.

Deteriorating----------housing that is in need of minor repair; needs paint, roof shingles missing, foundation may need repair, exterior walls need repair, general run down appearance of the house.

Dilapidated----------housing that is beyond repair and is not fit for human habitation.

Housing conditions can be affected by various factors. These factors would include absentee ownership, unpaved streets, lack of public water and sewer, poorly planned or laid-out subdivisions, low income and low educational levels. In Warsaw, these factors are found primarily in the nonwhite areas where housing conditions are extremely poor. A windshield survey of the housing conditions provided the following facts:

TABLE 8

HOUSING CONDITIONS WITHIN WARSAW

CONDITION	NO. OCCUPIED	NO. VACANT	TOTAL UNITS	PERCENT
Standard	354	2	356	41.3
Deteriorating	343	7	350	40.7
Dilapidated	135	20	155	18.0
TOTALS	832	29	861	100.0

The above table indicates the severe problem Warsaw has in housing. Deteriorating and dilapidated housing accounts for 58.7 percent of the total housing within the corporate limits. This is an extremely high percentage. Looking at the housing condition map, the majority of the deteriorating and dilapidating housing is found in the areas noted as nonwhite. In these areas, the majority of the factors contributing to blight can be found. Many of the homes are not owned by the occupants, the streets are not paved and some do not have bath facilities.

Many of the homes should be torn down and replaced with adequate housing. The only solution may be in the form of federal assistance to help finance low-rent housing. Building codes will insure that minimum standards will be met and that the minimum facilities needed are installed in new houding units.

Housing in the fringe area is better than that inside Warsaw, but far from satisfactory, as shown in Table 9.

TABLE 9
HOUSING CONDITIONS WITHIN FRINGE AREA

CONDITION	NO. OCCUPIED	NO. VACANT	TOTAL UNITS	PERCENT
Standard	96	10	106	50.5
Deteriorating	57	1	58	27.6
Dilapidated	31	15	46	21.9
TOTALS	184	26	210	100.0

Availability of Housing

Homes for sale or apartments for rent are not readily available within Warsaw or within the fringe area. Two apartment buildings have been constructed adjacent to N.C. 24 within the fringe area. Each apartment contains 8 units.

Within the corporate limits, two single family dwellings, classified in standard condition were unoccupied. The windshield survey indicated one duplex and 4 single family dwellings, all classified as deteriorating structures, were vacant. Only one triplex exists in Warsaw and it was occupied at the time of the survey.

Future Residential Development

The Land Use Survey and Analysis and the Population and Economy Study for Warsaw will provide the foundation for determining where future residential development will occur and how much land will be needed. However, before these predictions are made, it will be necessary to make the following assumptions:

1) Single family dwelling units located on relatively large lots will continue to be the primary mode of housing;

2) The Town of Warsaw will be able to provide the necessary services, particularly sewage collection and disposal.

3) Most of the new residential growth should be encouraged to occur within the existing town limits due to the large amount of undeveloped land and so that the town's services can be expanded economically;

4) The use of mobile homes as dwelling units will increase substantially; and

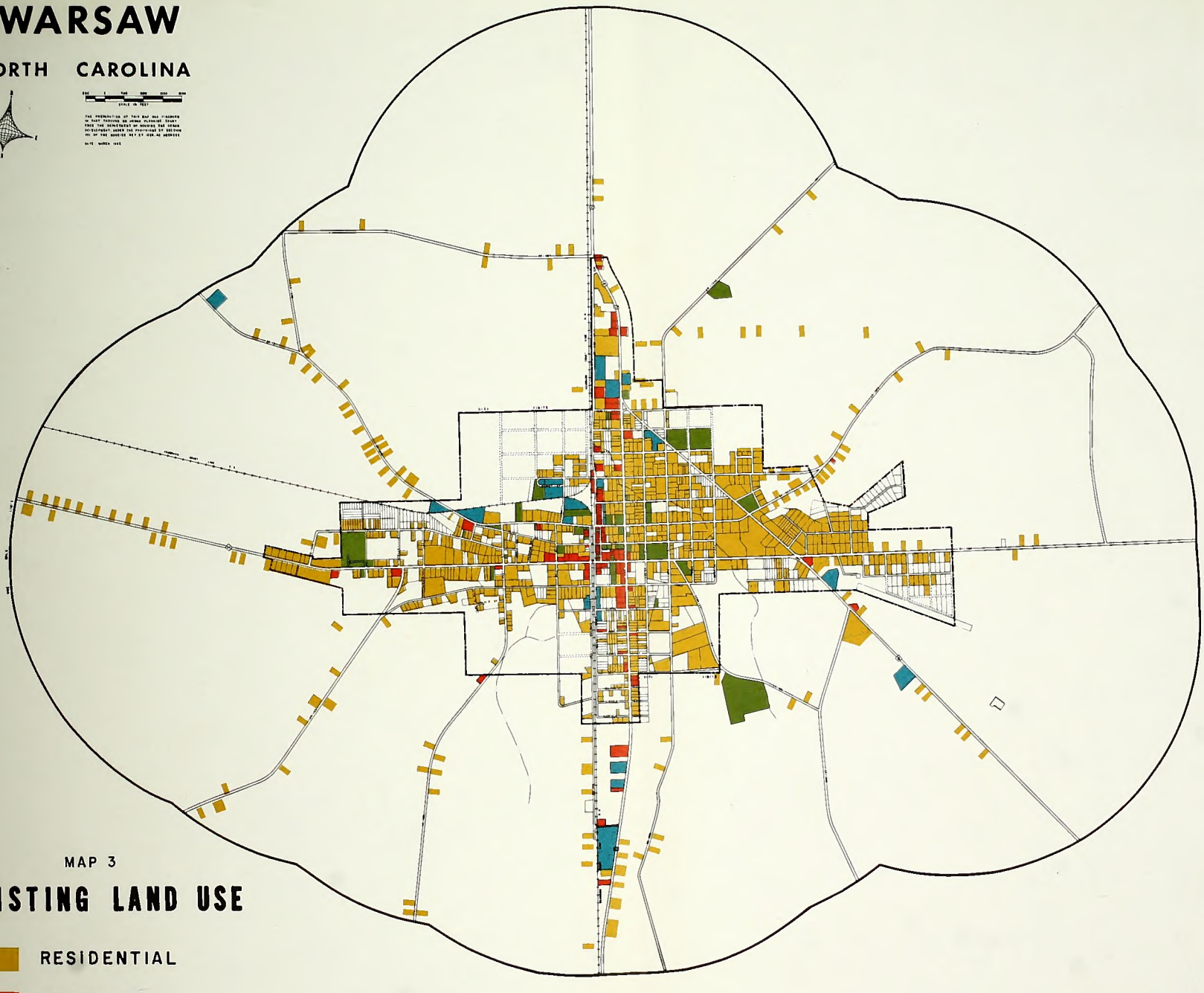
5) The population will increase moderately, as projected.

Assuming that the Warsaw Planning Area will have a population of 4,500 in 1990, as projected in the Population and Economy Section, an increase of 1,300 over the 1970 population, the number of dwelling units and the amount of land needed to accommodate them can be estimated. Using the 1960 census data of 3.1 persons per dwelling unit, 1,300 additional population would require 419 new dwelling units. A safety factor of 31 dwelling units will be added to offset those destroyed or demolished. Thus, it is estimated that 450 new dwelling units will be needed in the Warsaw Planning Area by 1990. It will be assumed that these dwelling units will be located on fairly large lots - 2.5 per acre. Thus, 180 additional acres of land will be needed for residential purposes by 1990.

New residential development should be encouraged to take place in existing residential neighborhood or in areas which are easily and economically served by the town's urban services, particularly sewer. Since scattered development is more expensive to serve, vacant land in existing neighborhoods should be developed first.

WARSAW

NORTH CAROLINA



MAP 3

EXISTING LAND USE

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- RECREATIONAL, CULTURAL, & GOVERNMENTAL

Most new residential development should take place within the existing town limits, as the recent annexation added substantial undeveloped land to handle new development. There are very few vacant lots in the older sections of Warsaw around the Central Business District.

New development in the Southern and Northern sections of Warsaw should be encouraged because of the ease in providing sewer service. The town's sewage treatment plant is located southeast of the town limits. The southeast quadrant of the town is being developed slowly. Complete development should be encouraged because of the ease of providing sewage service.

The area around the Douglass School should be developed further as both water and sewer service are available. A local church owns substantial property in the northwest quadrant of the town which it intends to use for housing. While neither water nor sewer is presently available in this area, it can be provided at reasonable cost. The newly annexed eastern area is expected to develop rapidly. This area will be served with water and sewer by the end of 1970 with funds the town voters approved in 1969.

While it is anticipated that most new residential dwellings will be single family units, apartments are becoming more popular for young families and older couples, and their use in Warsaw should be considered. Mortgage money is tight for single family dwelling units, but seems to be plentiful for apartments. Such multi-family dwellings should be allowed in existing residential areas where there is adequate vacant land and safeguards to insure that the character of the neighborhood is not down graded. Areas around schools are desirable apartment locations for young couples, while apartments for older couples should be located near the Central Business District.

The use of mobile homes as permanent residences is expected to increase substantially. Adequate spaces in well designed mobile home parks should be provided in and around Warsaw. Safeguards should be taken to insure that surrounding property values will not be affected by the addition of mobile home parks.

The town should actively encourage the development of residential areas which are already served by the town's water and sewer. These areas are generally found west of the railroad and along U.S. 117 south of College Street. There are several steps which the town can take which will guide its future residential growth.

1) Adopt and Enforce Subdivision Regulations - by requiring new subdivisions to have paved streets, curb and gutter, sidewalks, and water and sewer lines, the town would not need to have a bond election when it annexed new areas to the town. In addition, the cost of these improvements would be borne by those receiving the benefits.

2) Make existing residential areas more attractive by:

   a. Paving streets
   b. Sponsoring clean-up, fix-up, and paint-up campaigns.
   c. Adopting and enforcing housing and building codes, and removing unsafe and unsanitary houses, when construction of public housing is completed, or when other housing is available.
   d. Providing neighborhood or mini parks throughout residential neighborhoods.
   e. Provide adequate street lighting throughout the town.

3) The Warsaw Planning Board, in cooperation with local realtors, should prepare a list of available, vacant lots for home builders in order to encourage the development of existing residential areas.

Commercial Land Use

The commercial classification is divided into two catagories for purposes of analysis.

Central Business District - The CBD is located within a three block area bordered by College, Pollock, Front, and Pine Streets. The majority of the stores and businesses abut Front Street.

On factor is obvious after a quick glance of the CBD. The majority of the stores are very old and run down. The fronts of the stores are drab in appearance and offer no appeal as a shopping area. However, a continuous canopy has been placed along a two block area of the business area. The job appears to be only half complete because the remaining portion of the store fronts have not been touched. The businesses fronting College Street are far more appealing primarily because the buildings are newer and more modern.

An immediate solution to the drabness of the downtown area would be a few cans of paint. Color-coordinated store fronts would add a great deal of color and freshness to the downtown area.

Another extremely unappealing factor within the CBD is the railroad, however, this obstacle can not feasibly be moved. It can be landscaped in such a manner that the railroad is not as obnoxious as it presently appears.

Highway Business - Highway business includes a multitude of uses, but basically in Warsaw, these are represented by banks, grocery stores and service stations. Highway business uses are a necessary service in all communities but too often highway business is allowed to grow in a haphazard manner. This is the type of growth most towns and cities want to avoid. An example of haphazard business development is seen on U.S. 117 north of Warsaw. Along this stretch of highway a junk yard is located adjacent to residences, and across the road is a vacant livestock auction house. Service stations with junked cars are scattered along the highway. These are common results of the haphazard use of land. Conflicts between land use can be avoided in the future by enacting zoning controls based on the Land Development Plan.

Many of the auto dealers are located within buildings that appear to be small and cramped. Future locations should be within areas where both inside and outside display areas can be of adequate size. Many of the dealers are using areas in front of their buildings to display cars. These areas should be used for sidewalks rather than display lots.

Commercial Development

Even though Warsaw is expecting a moderate population increase in the next two decades its influence as a commercial center is expected to increase only slightly. The primary retail and wholesale centers will continue to be Clinton, Goldsboro, Wallace, and Wilmington. Warsaw will serve as a community shopping area.

Commercial activity is widely dispersed throughout Warsaw, resulting in numerous instances of mixed land uses. The enforcement of the Zoning Ordinance now in effect perpetuates this situation.

In an effort to upgrade the quality of the shopping facilities in Warsaw and to strengthen the CBD, the Town and the merchants must work together to make the shopping areas more convenient for the customer and to provide a wider variety of goods and services. Each merchant and property owner should take a critical look at his place of business, as to internal and external appearances and decide what is needed to improve the structure and the products and services he sells. Warsaw should be promoted as a unified shopping area through areawide advertising.

The following suggestions are aimed at improving the physical environment of the CBD and making shopping more convenient:

1) Public Restrooms - Provided at convenient locations in the CBD for the pedestrian shoppers.

2) Benches - Provided throughout the CBD for shoppers to pause and rest.

3) Off-Street Parking and Loading - Should be provided for convenience of the shopper and to promote better traffic circulation in the CBD. The most desirable areas for parking would be directly behind the CBD. This would require removal of existing buildings. The other alternative is to provide parking across the railroad from the CBD.

To make the above improvements a reality, a united effort by many groups will be necessary. The garden club might provide additional trees along the railroad and in the CBD. The local Jaycees might provide benches in the CBD. The town and the merchants should work together to provide public restrooms. The town should provide needed street and sidewalk improvements. The merchants should provide off-street parking and loading.

Future Commercial Development

The existing CBD consumes 15 acres of land. An additional 5 acres or 20 total acres are shown on the Development Plan Map. The additional acreage will use existing older residences near the CBD. Highway or traveller-oriented business land uses consume 17 acres of land. This category is expected to increase substantially due to the large amount of through traffic on N.C. 24 and U.S. 117. The Development Plan Map shows a total of 27 acres needed by 1990 for highway business. All of these uses are scattered, except for one developer who has plans for a small shopping center on N.C. 24 in east Warsaw. Much of the new growth will occur on the N.C. 24 bypass when it becomes a reality.

Industrial Land Use

Industrial includes all processing, manufacturing and wholesale activities.

Industry and Wholesale Trade - Industry and wholesale trade represents a large portion of the economic base of Warsaw. Two industries associated with Warsaw are National Spinning Company and Reeves Brothers, but the plants are not located within the planning area. National Spinning and Reeves, however, provide many jobs for persons residing within Warsaw and its fringe area.

Within the corporate limits of Warsaw, the largest industry is Warsaw Manufacturing Company, a manufacturer of dresses and other apparel. An IGA grocer distributor, located within the fringe area, represents the largest wholesale operation within the Warsaw planning area.

It should be noted that certain site qualifications are usually necessary for industry and large wholesale businesses. Normally a rail siding is necessary. The site should be fairly level and located near or on a main traffic artery and have water and sewer available. Most of these qualifications can be found in the northern and southern sections of Warsaw along the Seaborad Coast Line Railroad. These two areas are the best industrial sites within Warsaw and its fringe area, and should be reserved for that purpose.

Warsaw has a junk yard for wrecked cars located on U.S. 117, as you enter the town on the north side. Some of the junked cars are hidden by several homes located in front of the junk yard. There is nothing that will effectively enhance the situation except the removal of the cars. However, this may not be feasible because the problem would just be moved to another part of town. This eyesore could be lessened somewhat by screening the junked cars from the traveling public and the local residents. The junk yard should not be allowed to expand.

One method of solving the problem of expansion of junk yards would be to exercise extraterritorial zoning and not allow junk yards within districts where they are not compatible to the surrounding land uses. It is not intended to totally eliminate the existence of junk yards in or near Warsaw, but rather to place the junk yards within an area compatible to such uses.

Several inoperable cars were seen parked on lots throughout Warsaw. This is a practice that should be dealt with by the town council. Clean-up, fix-up, and paint-up campaigns often provide incentive for cleaning up junk cars, as well as other discarded items.

Industrial Development - Such site characteristics as access to major highways and railroads, water, sewer and electrical service, flat land, and sites near adequate labor supplies, are generally available in the Warsaw area. There is, however, a problem of wet land in the area due to inadequate natural drainage. Thus, well drained industrial sites should be protected and preserved for industrial uses.

The best potential industrial sites in the Warsaw area are located North and South of town along the Seaboard Coast Line Railroad and U.S. Highway 117. These sites are not served by public water and sewer, but they can be served economically.

The Land Development Plan Map shows only 5 acres of new industrial land within the town limits. Outside of town 75 acres are shown north of the town limits. Additional acreage is available in this area if needed. South of town two sites of approximately 30 acres each are shown.

Since most new industries are expected to locate outside the town limits, Warsaw should extend its zoning ordinance into the one mile area so that these industrial sites will be protected from encroachment by residences and businesses. The town should also implement the other facets of this plan in order to make the town a desirable location for new industry.

Recreational, Governmental and Cultural Land Uses - Churches, schools, cemeteries and town owned property comprise the majority of the public and semipublic classification. This classification represents the third largest usage of land in Warsaw.

Douglass High School is the newest of the schools in Warsaw. The remaining schools are located in structures that are beginning to deteriorate. Site size is extremely important for a school. None of the school sites within Warsaw are of adequate size by today's standards.

Parks and recreation facilities, which could be classified public, do not exist in Warsaw, except for the school playground areas. Recreation may be an area where local civic clubs could provide additional service. The clubs working together could help develop and support a park and recreation program for Warsaw.

Schools generate larger than normal traffic flows. Therefore, location of the particular land use is extremely important. Schools, parks and other similar uses should have sites large enough for parking as well as the building and other facilities.

Recreational, Government, and Cultural Development

Opportunities for outdoor recreation in the Warsaw area are meager. The three schools within the town provide the only place for recreation during the summer months, but there has been no supervision prior to 1970. This summer the town has sponsored a supervised recreation program for all children at the Warsaw Junior High School site. This program was successful, and the town should consider expanding the program. The existing location is not centralized and thus not convenient for the small children. Possibly such a program could also be offered at Douglass Elementary School, or at a more centralized location in the town, such as the former Warsaw Elementary School.

Small neighborhood playgrounds, which would provide unsupervised year-round recreation, should be provided in at least two areas within the town. Ideal location would be adjoining school sites. There is vacant land adjoining both the Douglass Elementary School and the Warsaw Junior High School which could be converted into neighborhood playgrounds.

There is also a definite need in Warsaw for some passive recreation facilities. The floodplain of Stewarts Creek south of the town limits would make an ideal place for a community park. The site could probably be acquired for little or nothing and there is federal assistance available for developing this site into a community park, with picnicking, nature trails, etc.

Governmental land uses in Warsaw are expected to expand very little within the planning period. Renovation of existing facilities and expansion of the water and sewer facilities are all that is anticipated.

There are three public schools in Warsaw, all provided by Duplin County. During the 1969-70 school year, the former Warsaw Elementary School was operated as a kindergarden and the former Warsaw Junior High School was not operated. Douglass Elementary School served grades 1 through 6. Grades 7 through 9 were bussed to Kenansville Junior High School. All high school students attended James Kenan High School, located between Warsaw and Kenansville. The only change anticipated for the coming school year (1970-71) is for the Warsaw Junior High School to serve grades 7 through 9 and Warsaw Elementary will be closed. In the School Survey for Duplin County, 1970, prepared by the N.C. Department of Public Instruction, School Plant Planning Division, this school was recommended to be phased out of service because of its age and construction deficiencies.

Rural Residential

The area outside Warsaw's corporate limits is not expected to develop rapidly. The recent annexation by the town left no concentrations of population in the fringe area. Most new development will need the town's sewerage system, which is having difficulty serving its own population. Thus, the amount of growth outside of Warsaw will depend on the town's capacity to provide these areas with sewer service and other urban services.

Most of the rural residential area will continue to be used for agriculture, with some scattered residential development.

Streets and Highways

The large amount of land devoted to the streets and highways (about 20 percent) attests to their importance to the residents in their day to day living. Every major land use is dependent upon streets and highways for its existence. Thus, a functional system of streets and highways, which will move people and goods from one point to another efficiently and conveniently with maximum safety and economy is a necessity in achieving desirable physical development.

There are many benefits to be derived from a carefully planned transportation system, but the primary objective is to serve anticipated future travel demands with directness, ease, and safety. In addition, the following benefits can be derived:

1) A minimum amount of land will be required for streets and highway purposes,

2) Because each street is designed for a particular purpose, a substantial savings can be realized in construction and maintenance cost,

3) Local citizens will know which roads will be developed and thus have assurance that their residential street will not one day become a major traffic carrier,

4) Land developers will be able to design subdivision streets in a non-conflicting manner which will aid the implementation of the overall plan,

5) Advance knowledge of highway widening and construction will help eliminate damage to property values,

WARSAW

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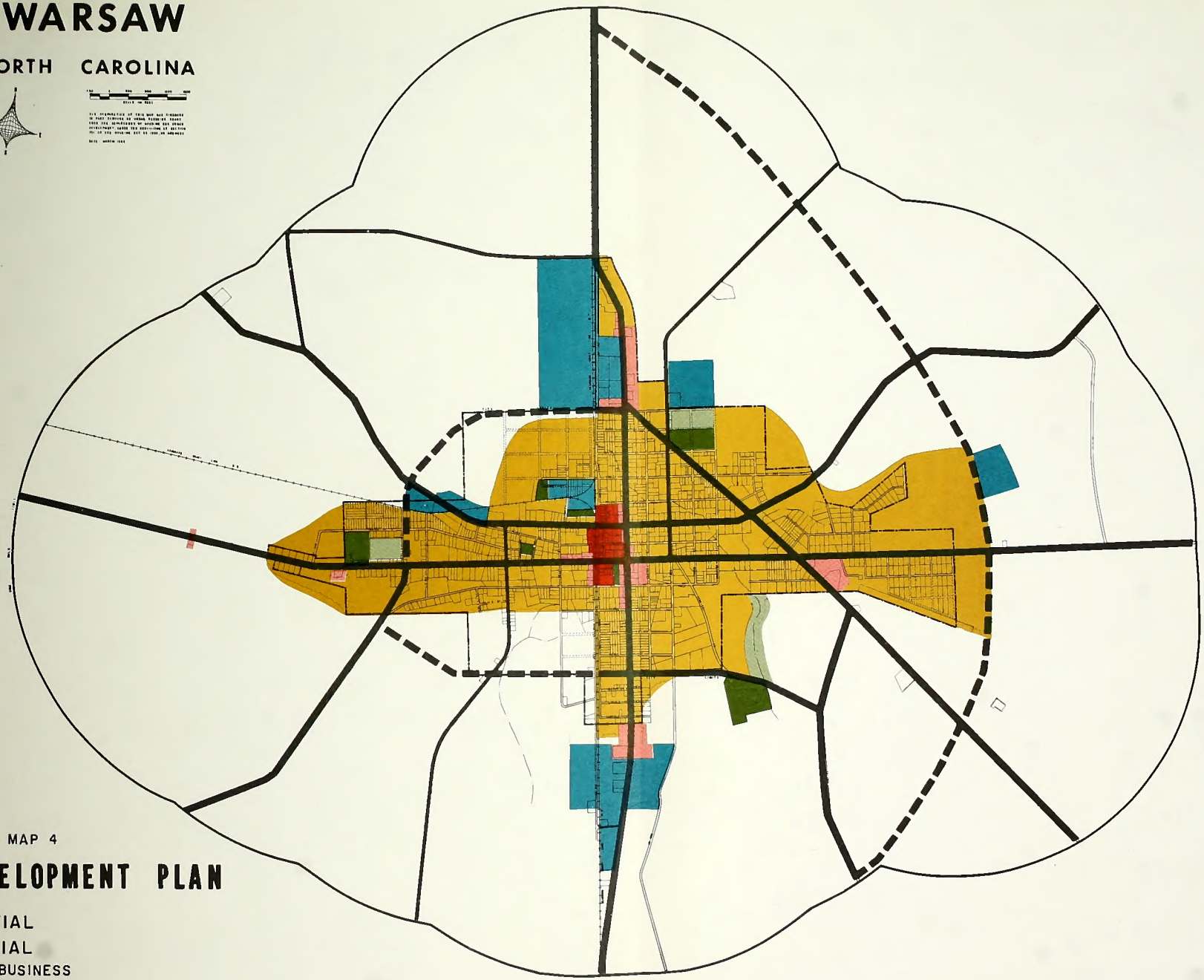

MAP 4

LAND DEVELOPMENT PLAN

- RESIDENTIAL
- COMMERCIAL
  - CENTRAL BUSINESS
  - HIGHWAY BUSINESS
- INDUSTRIAL
- PUBLIC & SEMI-PUBLIC
  - RECREATIONAL
  - GOVERNMENTAL & CULTURAL
- AGRICULTURAL & RURAL RESIDENTIAL

THOROUGHFARE PLAN

	EXISTING	PROPOSED
MAJOR THOROUGHFARES	▬▬▬	▪▬▪▬▪
MINOR THOROUGHFARES	▬▬▬	▬ ▬ ▬

6) Rural residents will have improved access to the urban areas and travel time around these areas can be greatly reduced, and

7) Also assure compliance with N.C. Highway Department design standards for maintenance (thru good subdivision regulations).

The streets and highways in the Warsaw planning area have been classified into the following categories:

1) Local Access Streets - Serve abutting properties where the traffic volume is relatively low and through traffic is usually discouraged.

2) Minor Thoroughfares - Perform the function of collecting traffic from the local access streets and carrying it to its destination or to a major thoroughfare.

3) Major Thoroughfare - Serve the town as the heavy traffic carriers, moving the traffic through and around the town with directness and ease.

Minor Thoroughfares

S.R. 1346, S.R. 1140, and S.R. 1387 serve as minor thoroughfares, collecting traffic from the northern portions of Duplin County and moving it into Warsaw. S.R. 1106 serves the same function for the southern portions of the county.

Major Thoroughfares

U.S. 117 (Pine Street) serves as a major north-south route, connecting U.S. 301 in Wilson with U.S. 17 in Wilmington. The proposed U.S. 117 Bypass will shorten travel time through the Warsaw area.

N.C. 24 (College Street) is a major east-west traffic artery, connecting Jacksonville and Fayetteville. The N.C. 24 Bypass is not shown on Map 4 because it is outside of the planning area. Its proposed location is south of the town limits.

S.R. 1341 - S.R. 1305 (Hill Street) serves as a major thoroughfare for the rural areas in northern Duplin County. S.R. 1900 and S.R. 1901, with a proposed connection with S.R. 1105, will provide better east-west traffic movement. S.R. 1105, with a proposed connection with Dudley Street and U.S. 117, facilitates shorter travel time from north to south.

PROBLEMS OF PAST DEVELOPMENT

1) Poor Street Design - This can best be explained by a quick glance of Memorial Drive. When this highway was constructed, it intersected several streets at 45 degree angles. This created extremely dangerous intersections. Intersections of this type do not provide the proper sight distance needed to allow the driver of a vehicle to safely cross the intersection. All of the 45 degree intersections could have been avoided by the realignment of intersecting streets or by the location of Memorial Drive in an undeveloped area.

   Dead-end streets also appear at several places in the fringe area. Properly designed streets would provide turnarounds or culs-de-sac at the end of dead-end streets. This type street could also be used as a terminus for a temporary dead-end.

   Offset street intersections should be avoided in the design of streets. Intersecting streets offset by less than 150 feet are considered to be dangerous to the driving public. It requires the driver to cross the intersection at an angle or to pull out into a traffic lane and stop immediately to turn.

2) Inadequate Lot Size - Poor lot platting practices have created many odd shaped, extremely small and useless lots. The construction of Memorial Drive, as previously mentioned, resulted in many odd shaped lots. In many instances, lots abut streets on three sides. Double frontage lots should be avoided in residential development. It is very expensive for either the town or property owner to provide for curb, gutter, paving or water and sewer lines when property abuts on two or three streets.

3) Poor Drainage - Stewarts Creek is the primary drainage channel for Warsaw. Over the past years, this creek has been untouched and allowed to silt in with each rain. What once was an 8 foot deep canal is now a two foot low place running along the ground.

   When heavy rains fall, the western portion of Warsaw will usually flood. It is thought by many persons that Stewarts Creek should be dug out to the depth it was several years ago and that this would eliminate a great deal of the flooding problem in Warsaw. However, the canal must be maintained or the flood problem would occur again as the canal silts in.

Bulkheading the canal would eliminate the majority of the silting problem and would not normally require a great deal of maintenance. However, this would be a very expensive project to finance. The first method would provide a cheaper cost and an immediate solution to an old problem at a cheaper cost but require regular maintenance.

4) Inadequate Housing - Many different reasons can be given that would explain the poor housing conditions in Warsaw. These reasons might range from low educational and income levels to the lack of appropriate building codes. Warsaw's Town Council has recently adopted the Southern Standard Building Code. This Code applies to the old as well as the new dwelling units within Warsaw. However, this is a cure for only part of the problem. The design of the street and lot upon which the dwelling unit is built is extremely important. Subdivision regulations are the next step towards insuring that Warsaw will have desirable neighborhoods in which to live in the future. Public housing is needed to provide adequate quarters for all citizens.

5) Mixed Land Use - Warsaw should and must guard against the continuation of incompatible land use. The incompatibility of land uses can be controlled by an effectively administered zoning ordinance. Land should be reserved for its best usage, whether it be within the corporate limits or within the fringe area. This can be done with the zoning ordinance. The mixed use of land seen as one enters Warsaw from the north on U.S. 117 must be avoided at all costs.

6) Mobile Home Problems - The mobile home should be located within a mobile home park or a mobile home subdivision. In the past the mobile home was considered by many to be something to avoid, but today the mobile home is an acceptable method of housing. Mobile homes should not be allowed to locate on the same lot with another principal structure. The same development standards should be adopted for the mobile homes as have been adopted for the traditional dwelling unit.

Mobile home parks should be developed the same as the traditional housing subdivision. One basic difference should be noted; the lot size. The mobile home park lot size should be a minimum of 5,000 square feet. However, this small size lot would dictate at least public sewer facilities and preferably both public water and sewer facilities. If septic tanks are to be used, the lot size should be tripled in size.

CONCLUSIONS

- The most desirable area for future residential development is located directly east of Warsaw. At present, the land uses within this area are, for the most part, compatible. It is imperative that this land be protected against the encroachment of undesirable land uses.

- Vacant land should be reserved in the northern portion of Warsaw's fringe area for new industries. This area would be suitable for industries that produce noise, odors or vapors. This location would allow the prevailing winds to blow the undesirable elements away from town.

- There is a definite need for corrective measures to be taken against the deteriorating housing conditions in Warsaw. Major clean-up campaigns may be one method of establishing interest in a neat and clean town. Building codes have been adopted and should be strictly enforced. Public housing or rent subsidy housing is also needed.

- Subdivision design and lot platting procedures must be adopted for Warsaw and the fringe area.

- Septic tanks should be avoided, if at all possible, within areas that have or can obtain public sewage service.

PLAN IMPLEMENTATION

This Land Development Plan provides for the orderly growth of Warsaw for the next 20 years. Its purpose is to insure that there is adequate and desirable land available for residences, businesses, and industries by insuring that they are arranged so they will be compatible.

In order for this plan to be realized, it must be used on a day-to-day basis. Its use must become a habit in guiding all policies affecting growth. There are many ways which Warsaw can implement this plan, they are divided into short range and long range. The short range proposals are generally small physical improvements and should be completed in 3 to 5 years. Work on the long range proposals should begin immediately, but they will generally not be completed for 10 to 20 years.

Short Range Plan Implementation Proposals

a) Subdivision Regulations - Adopt and enforce subdivision regulations to help eliminate development errors and to insure that the cost of improvements (water and sewer, etc.) are borne by those who benefit.

b) Street Paving Program - Approximately 55 percent of the streets maintained by the Town of Warsaw are unpaved. Paved streets make the town more attractive and pleasant. Revision of the assessment policies and the passage of a local bond issue will be necessary to support a street paving program.

c) Clean-up, Paint-up, and Fix-up Campaign - Campaigns to improve existing neighborhoods and to improve the quality of the living conditions in Warsaw should be sponsored by local garden clubs or other civic organizations in cooperation with the town. Such efforts would serve to make existing developed areas more desirable for new development and thus, reduce the need to extend community services into previously undeveloped areas.

d) Housing and Building Codes - Adopt and enforce a housing code to insure that existing housing is safe and sanitary and a building code to insure high quality construction on new or expanding housing. Unsafe and unsanitary housing should be removed, when public housing is completed or when adequate housing becomes available.

e) Street Name Signs - A uniform and complete system of street name signs is needed. Local civic clubs should be encouraged to participate in the project. The Jaycees or Lions could help raise part or all of the funds. Other groups might assist the town in the installation.

f) Street Lights - An adequate system of street lights reduces crime and driving hazards and makes the town more attractive. Approximately 40 new street lights are needed. Most of these are in the newly annexed areas.

g) List of Vacant Building Lots - The Planning Board should prepare a list of vacant lots in the existing neighborhoods and encourage their sale through local realtors. The Planning Board could also work with owners of large tracts of land in preparing sketches for the layout of the property for development.

h) Park and Recreation Space - The Town of Warsaw should establish small neighborhood play grounds in at least two areas to provide recreation for surrounding children. Ideal sites could be adjacent to Douglass Elementary School and Warsaw Junior High School. A community park in the floodplain of Stewart's Creek south of town could provide recreation for all ages. Federal grants up to 50 percent of the cost of developing the parks are available and Warsaw should apply for federal assistance to purchase and develop such a park.

i) Public Restrooms - The town and the local merchants should work together to provide public restrooms in the Central Business District.

j) Benches - The local Jaycees, Rotarians or other local civic clubs should work together in providing benches throughout the CBD for the convenience of the shopper. The town should provide maintenance.

k) Street Trees - The local garden clubs or other civic clubs should be encouraged to sponsor a tree planting program in the CBD. Special emphasis should be placed on landscaping the railroad tracks.

l) Off-Street Parking and Loading - Off-street parking should be provided in the CBD for the convenience of the shopper and to promote better traffic circulation. Off-street loading should be provided so that trucks unloading merchandise will not interfere with traffic.

m) Industrial Sites - The Planning Board and the Town Board of Commissioners should work with the Duplin Development Commission in locating and preserving key industrial sites. Protection through zoning or options should be provided for these sites.

Long Range Plan Implementation Proposals and Techniques

a) Citizen Participation - The success of the Land Development Plan rests with the local citizens. Their understanding and support of the Plan is imperative for its success. Many civic and religious groups participate in the implementation of the plan by contributing time, labor and money. Such groups could undertake beautification projects, or donate playground or other needed equipment for the recreation projects.

b) Zoning and Subdivision Regulation - These are legal tools which can help shape the town's physical development. Zoning regulates the use of land within the planning area. Subdivision regulations guide the development of new land in order to secure a better layout in design of new subdivisions and provide greater security of title for home buyers.

c) Public Housing - Low rent public housing is one means of providing low income families with safe and sanitary housing. Public housing also provides housing for displaced families moved from unsafe housing by the local housing code. The 200 units of public housing which the town applied for in 1969 is desperately needed now.

d) Codes - Warsaw has adopted a building code which regulates all new construction. A housing code which sets minimum standards for space, sanitary heating and lighting facilities for both new and existing housing, should be adopted. Then a systematic inspection program could be initiated. This would help eliminate some of the existing substandard housing conditions.

e) Federal Assistance - Loans and grants, for acquiring and developing outdoor recreation areas and facilities, neighborhood facilities, and public works planning, are available from various federal agencies. Most federal grants are on a matching basis. The local matching portion often can be land or equipment. Thus, the local share does not necessarily need to be money. More detailed information on federal assistance can be obtained, on request, from the North Carolina Department of Local Affairs.